

REMARKS

Reconsideration and allowance in view of the following remarks are respectfully requested.

Claims 1-23 remain pending in the present application.

The above amendments to the claims are provided to correct minor informalities and/or to clarify the claimed subject matter. No new matter has been added, nor is further search or consideration believed to be required as a result of these amendments. Accordingly, applicant respectfully requests that the above amendments to the claims be entered.

Applicant notes with appreciation the Examiner's indication that claims 2, 6-11, 13, and 15-23 would be allowable if rewritten in independent form. However, applicant has not adopted the Examiner suggestion because the base claims from which these claims depend are believed to be allowable for the reasons presented below.

Claims 1 and 3-5 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of co-pending Application No. 10/384,329 ("the '329 application"). Applicant respectfully traverses this rejection for the reasons presented below.

As explained in M.P.E.P. § 804(II)(B), a double patenting rejection of the obviousness-type is "analogous to [a failure to meet] the nonobviousness requirement of 35 U.S.C. 103" except that the patent principally underlying the double patenting rejection is not considered prior art. *In re Braithwaite*, 379 F.2d 594, 154 U.S.P.Q. 29 (CCPA 1967). Therefore, any analysis employed in an obviousness-type double patenting rejection parallels the guidelines for analysis of a 35 U.S.C. 103 obviousness determination. *In re Braat*, 937 F.2d 589, 19 U.S.P.Q.2d 1289 (Fed. Cir. 1991); *In re Longi*, 759 F.2d 887, 225 U.S.P.Q. 645 (Fed. Cir. 1985). Because the analysis employed in an obviousness-type double patenting determination parallels the guidelines for a 35 U.S.C. § 103(a) rejection, the factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 U.S.P.Q. 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are employed when

making an obvious-type double patenting analysis. M.P.E.P. § 804 (II)(B)(1). These factual inquiries are summarized as follows:

- (A) Determine the scope and content of a patent claim relative to a claim in the application at issue;
- (B) Determine the differences between the scope and content of the patent claim as determined in (A) and the claim in the application at issue;
- (C) Determine the level of ordinary skill in the pertinent art; and
- (D) Evaluate any objective indicia of nonobviousness.

M.P.E.P. § 804 (II)(B)(1) further states that any obviousness-type double patenting rejection should make clear:

- (A) the differences between the inventions defined by the conflicting claims - a claim in the patent compared to a claim in the application; and
- (B) The reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim at issue would have been an obvious variation of the invention defined in a claim in the patent.

Applying this standard to the present application requires comparing present claims 1 and 3-5 to claim 4 in the '329 application. Claim 4, currently on file in the '329 application, is a combination of independent claim 1 and dependent claim 4, and is reproduced below as it would appear if combined with claim 1:¹

4. (Currently Amended) A sample cell for use in sidestream respiratory gas monitoring, comprising:

(a) a sample cell body having a gas flow path defined therethrough, wherein the sample cell body is generally rectangular and includes:

- (1) a first side defined in a first plane,
- (2) a second side opposite the first side and defined in a second plane that is generally parallel to the first plane, wherein the gas flow path is defined from the first side to the second side of the sample cell body, and wherein a longitudinal axis of the sample cell body is also defined between the first side and the second side in a direction that is generally perpendicular to the first plane and the second plane,

¹ The claims in the '329 application were last amended by an Amendment dated January 9, 2006 responsive to a non-final Office Action dated August 9, 2005.

(3) an inlet port coupled to the first side of the sample cell body, wherein the inlet port has an outside diameter that is less than a length or a width of the first side of the sample cell body,

(4) an outlet port coupled to the second side of the sample cell body, wherein the outlet port has an outside diameter that is less than a length or a width of the second side of the sample cell body, and

(5) a first wall extending between the first side and the second side of the sample cell body;

(b) a flexible protrusion extending from the sample cell body such that a longitudinal axis of the flexible protrusion is disposed at an angle with respect to the longitudinal axis of the sample cell body and protrudes therefrom, wherein the flexible protrusion is configured to cooperate with a corresponding feature of a sidestream gas measurement assembly that at least partially receives the sample cell to maintain the sample cell body in an engaged relation with the sidestream gas measurement assembly;

(c) a sample chamber defined in the sample cell body along the gas flow path for receiving a respiratory sample from a patient;

(d) a first window defined in the first wall of the sample cell body and forming at least a portion of a boundary of the sample chamber, wherein the first window facilitates analysis of an amount of a gas or vaporized material disposed in the sample chamber responsive to the sample cell and the sidestream gas measurement assembly being placed in an assembled relationship; and

(e) a filter positioned at a location along the sampling tube.

Using the standard set forth in M.P.E.P. § 804 (II)(B)(1) some of the differences between claim 4 of the '329 application and claim 1 of the present application are as follows:

1) Claim 4 of the '329 application recites details of the sample cell body that are not recited in claim 1 of the present application;

2) Claim 4 of the '329 application recites a flexible protrusion extending from the sample cell body that is configured to cooperate with a corresponding feature of a sidestream gas measurement assembly, which at least partially receives the sample cell, to maintain the sample cell body in an engaged relation with the sidestream gas measurement assembly. No such feature is recited in claim 1 of the present application;

3) Claim 1 of the present application recites a filter portion and a sample collection portion in which the filter portion and the sample collection portion define a unitary assembly. No such feature is recited in claim 4 of the '329 application.

Now that the differences between claim 4 of the '329 application and claim 1 of the present invention are established, the next step is to determine whether one of ordinary skill in the art would conclude that the invention defined in the claim 1 of the present application would have been an obvious variation of the invention defined in claim 4 of the '329 application. On this point, the Examiner would be expected to identify a teaching or suggestion that would motivate one skilled in the art to modify claim 4 of the '329 application to render obvious claim 1 of the present application. This has not been done as yet.

That is, the Examiner has not explained why one skilled in the art would be motivated to modify the sample cell recited in claim 4 of the '329 application to omit (1) the details of the sample cell body, and (2) the flexible protrusion extending from the sample cell body. Nor has the Examiner explained why one skilled in the art would be motivated to modify the sample cell recited in claim 4 of the '329 application to include a filter portion and a sample collection portion defined as a unitary assembly. Applicant respectfully submits that absent any such motivation, it is improper to conclude that claim 1 of the present application would have been obvious to one of ordinary skill in the art based on claim 4 of the '329 application.

For the reasons presented above, applicant respectfully submits that independent claim 1 does not constitute obvious-type double patenting of the claim 4 currently pending in the '329 application. In addition, claims 3-5 also do not constitute obvious-type double patenting of claim 4 currently pending in the '329 application due to their dependency from independent claim 1. Accordingly, applicant respectfully requests that the above rejection of claims 1 and 3-5 be withdrawn.

Claim 12 stands provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 17 of the '329 application. In addition, claim 14 stands provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 18 of the '329 application. Applicant respectfully traverses these rejections for the reasons presented below.

Applying the obviousness-type double patenting standard to the present application requires comparing present claim 12 to claim 17 in the '329 application. Claim 17,

currently on file in the '329 application, is a combination of independent claim 12 and dependent claim 17, and is reproduced below as it would appear if combined with claim 12:

17. A sidestream carbon dioxide gas sampling system, comprising:

(1) a sampling tube adapted to carry a sidestream flow of gas from a sampling site, wherein the sampling tube is configured such that the sidestream flow of gas is a fraction of a total flow of gas exhaled from a user or inhaled by such a user;

(2) a sidestream carbon dioxide gas measurement assembly, including,

(a) a housing,

(b) a receptacle associated with the housing,

(c) a radiation source disposed in the housing on a first side of the receptacle,

(d) a radiation detector disposed in the housing on a second side of the receptacle, and

(e) a pump adapted to draw the sidestream flow of gas into the sampling tube from the sampling site; and

(3) a sample cell coupled to the sampling tube, the sample cell including:

(a) a sample cell body,

(b) a sample chamber defined in the sample cell body for receiving the sidestream flow of gas from such a user,

(c) a first window defined in a first wall of the body and forming at least a portion of a boundary of the sample chamber, wherein the first window is disposed at a location on the sample cell body such that the first window is proximate to the radiation source responsive to the sample cell being disposed in the receptacle, and wherein the first window is substantially transparent to at least one wavelength of radiation to be used in determining a concentration of carbon dioxide disposed in the sample chamber, and

(d) second window disposed in a second wall of the sample cell body at opposite sides of the sample chamber, wherein the second window is disposed at a location on the sample cell body such that the second window proximate to the radiation detector responsive to the sample cell being disposed in the receptacle, and wherein the second window is substantially transparent to at least one wavelength of radiation to be used in determining a concentration of carbon dioxide disposed in the sample chamber; and

(4) a first filter positioned along a portion of the sampling tube, a second filter disposed in the sample cell, a third filter in fluid communication with an exhaust port that is in fluid communication with the sample chamber, or a combination thereof.

Using the standard set forth in M.P.E.P. § 804 (II)(B)(1) some of the differences between claim 17 of the '329 application and claim 12 of the present application are as follows:

1) Claim 17 of the '329 application recites details of the sample cell, such as the first window and the second window, that are not recited in claim 12 of the present application;

2) Claim 17 of the '329 application recites a sidestream carbon dioxide gas measurement assembly that includes (a) a housing, (b) a receptacle associated with the housing, (c) a radiation source disposed in the housing on a first side of the receptacle, (d) a radiation detector disposed in the housing on a second side of the receptacle, and (e) a pump adapted to draw the sidestream flow of gas into the sampling tube from the sampling site. No such features are recited in claim 12 of the present application;

3) Claim 12 of the present application recites a filter portion and a sample collection portion in which the filter portion and the sample collection portion define a unitary assembly. No such feature is recited in claim 17 of the '329 application.

Having established these differences between claim 17 of the '329 application and claim 12 of the present invention, the next step is to determine whether one of ordinary skill in the art would conclude that the invention defined in the claim 12 of the present application would have been an obvious variation of the invention defined in claim 17 of the '329 application. On this point, the Examiner has not provided any teaching or suggestion explaining why one skilled in the art would be motivated to modify the system defined by claim 17 of the '329 application to omit differences (1) or (2) noted above. Nor has the Examiner explained why one skilled in the art would be motivated to modify the sample cell recited in claim 17 of the '329 application to include a filter portion and a sample collection portion defined as a unitary assembly. Applicant respectfully submits that absent any such motivation, it is improper to conclude that claim 12 of the present application would have been obvious to one of ordinary skill in the art based on claim 17 of the '329 application.

For the reasons presented above, applicant respectfully submits that independent claim 12 does not constitute obvious-type double patenting of claim 17 currently pending in the '329 application. Claim 14 of the present application depends from claim 12, and claim 18 in the '329 application depends from claim 12 of that application. Thus, the distinctions noted above with respect to claim 12 are equally applicable to claim 18. Accordingly, applicant respectfully requests that the above rejection of claims 12 and 14 be withdrawn.

RICH -- Appln. No.: 10/678,692

This response is being filed within the three-month statutory response period which expires on April 18, 2006. In addition, no additional claim fees are believed to be required as a result of the above amendments to the claims. Nevertheless, the Commission is authorized to charge the any fee required under 37 C.F.R. §§ 1.16 or 1.17 to deposit account no. 50-0558.

All rejections have been addressed. It is respectfully submitted that the present application is in condition for allowance and a Notice to the effect is earnestly solicited.

Respectfully submitted,

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